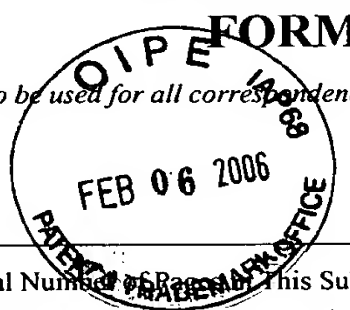
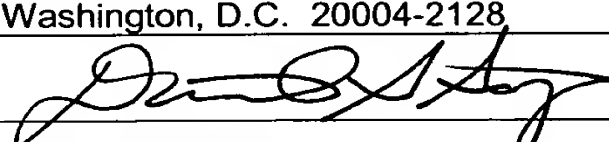


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<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing) 	Application Number	09/579,859	
	Filing Date	May 25, 2000	
	First Named Inventor	Timothy A. MUSGROVE et al.	
	Group Art Unit	3627	
	Examiner Name	Andrew J. Rudy	
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ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to Group (Amended Appeal Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Daniel S. Song, Reg. No. 43,143 Nixon Peabody LLP 401 9th Street, N.W. Suite 900 Washington, D.C. 20004-2128
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Attorney Docket No. 002566-7000

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re PATENT application of )  
Timothy A. MUSGROVE et al. ) Confirmation No. 3718  
Serial No. 09/579,859 ) Group Art Unit: 3624  
Filed: May 25, 2000 ) Examiner: Andrew J. Rudy  
For: PRODUCT FEATURE AND RELATION )  
COMPARISON SYSTEM )

**APPEAL BRIEF (AMENDED)**

Mail Stop Appeal Brief- Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed July 28, 2005, and in further response to the Notification of Non-Compliant Appeal Brief mailed January 6, 2006 by the Examiner of Record.

**I. REAL PARTY IN INTEREST**

CNET Networks, Inc. is the real party in interest.

**II. RELATED APPEALS AND INTERFERENCES**

There are presently no appeals or interferences known to the Appellants, the Appellants' representative, or the assignee, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**III. STATUS OF THE CLAIMS**

Claims 1, 2, 4-6, and 8-58 are pending in the present application, as submitted in an amendment filed on November 8, 2004 in response to the Office Action mailed July 8, 2004. These claims were again rejected in the final Office Action of January 28, 2005. Claims 3 and 7 were previously canceled. Thus, the present case

has been more than twice rejected. This Appeal is taken from the rejection of claims 1, 2, 4-6, and 8-58, the claims being submitted in the APPENDIX herewith.

#### **IV. STATUS OF AMENDMENTS**

No amendments have been filed subsequent to the final Office Action of January 28, 2005. A Request for Reconsideration was submitted on May 25, 2005 without amendments to the claims. In the Advisory Action mailed June 9, 2005, the Examiner maintained his rejection of the application.

#### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The present invention is directed to a method and system for ranking products using data records that indicate product features and values corresponding to the product features. Conventional methods and systems search data records of products for matching key words (or "hits") to determine the "relevance" of the data records to the search query submitted by the user, and provide a listing of products based on the matching of key words, for example, sorted based on frequency of matches. In contrast, as discussed in further detail below, the present invention in accordance with one embodiment utilizes feature categories that are associated with a product category, as well as the weighted importance of the feature categories, to rank the products so that the highest ranked products can be presented to the user. Moreover, as also discussed in further detail below, the present invention further requires receiving a selection of a feature category from a user, assigning an increased weight importance to the selected feature category, and providing a ranking of products that are ranked at least partially based on the increased weighted importance of the selected feature category. As explained below, this allows the present invention to generate a ranking of products which has been customized based on those feature categories deemed important by the user.

In particular, as described in the specification of the present application, feature categories correspond to those features which are important to a particular product category. (See Pg. 11, lines 8-12). Such feature categories are assigned based on available data in the data records indicating that all brands of the same

product have data associated with a particular feature, as well as other data, including product articles, reviews, etc. (See Pg. 10, lines 15-26 and 21-22). Feature categories for the product category of Personal Digital Assistants (PDA's) include screen type, memory, upgradability, and functions, etc., and are set forth in the specification as examples for clarity purposes. (See Fig. 5; Pg. 11, lines 7-15).

The method of the present invention recited in claim 1 assigns a plurality of feature categories corresponding to a plurality of product features for a given product category (201, 301, 401). (See Figs. 2a, 2b, 3, and 4; Pg. 10, lines 15-17, Pg. 11, lines 17-19, Pg. 12, lines 3-4, Pg. 14, lines 17-18). In addition, the method assigns a weighted importance to the plurality of feature categories (202, 302, 402). (See Figs. 2a, 2b, 3, and 4; Pg. 10, lines 20-26, Pg. 11, lines 19-20, Pg. 12, lines 5-6, Pg. 14, lines 18-19). The method also assigns evaluative metrics to each feature (422). (See Fig. 4; Pg. 16, lines 5-20). Moreover, the method ranks products in the product category "according to the weighted importance of the feature categories included in each item and based on each product's evaluative metrics" (424, 425). (See Fig. 4; Pg. 17, lines 8-12).

By initially presenting the user with ranking of products based on importance of features (not mere relevance or hits), the likelihood of providing the user with usable information regarding a product category is significantly increased by the present invention. In this regard, as explained in the example of personal digital assistants (PDAs), the present method of claim 1 allows PDAs to be ranked according to the average price first, then screen type, then memory, etc. (See Pg. 11, lines 13-14). Analogous to the example regarding PDAs described, when the present method of claim 1 is utilized for ranking digital cameras, the present invention may be implemented to not take into consideration numerous various product data that is generally not considered to be a distinguishing feature of digital cameras (for example, the power cord length) when providing the initial ranking of the cameras. Instead, the present invention allows consideration of those important features that distinguish one camera from another camera. In other words, the present invention allows consideration of those feature categories of a product category that are significant attribute of a product from a product evaluation viewpoint. This is attained

by the present invention by assigning feature categories, and assigning weighted importance to such feature categories as discussed above. For example, feature categories in order of importance for digital cameras may include optical zoom first, followed by resolution, followed by wide angle capability, etc.

Importantly, the present invention recited in claim 1 also receives selections from the user that indicates a plurality of feature categories that are important to the user (204, 423). (See Figs. 2b and 4; Pg. 11, lines 21-23, Pg. 16, lines 23-24). Thus, the present invention ranks the items, giving priority to the user's chosen feature categories (425). (See Pg. 16, line 24-Pg. 17, line 12). The present invention allows the user to provide input to thus, alter the weightings of the selected feature categories for a particular product category by indicating those feature categories that are important to the user so that items having the selected features are ranked higher. (See Figs. 2b and 4; Pg. 9, lines 3-6 and 17-18; Pg. 10, lines 10-14; Pg. 11, line 21-Pg. 12, line 2). For example, regarding digital cameras, a user may feel that, for their use, wide angle feature is the most important feature category, and should be weighted more heavily than other features such as the zoom or resolution features. Thus, in view of the above described features, claim 1 also specifically recites "receiving a plurality of selections from a user indicating a plurality of feature categories of importance to the user" (204, 423), and "assigning an increased weighted importance of the selected feature categories". (See Figs. 2b and 4; Pg. 11, line 21-Pg. 12, line 2, Pg. 16, line 23-Pg. 17, line 8).

In accordance with independent claim 1, a customized ranking of products is generated "based on the weighted importance of each feature categories, the increased weighted importance of the selected feature categories, and the product's evaluative metrics" (424). (See Fig. 4; Pg. 16, line 23-Pg. 17, line 8). This generated customized ranking of products is provided to the user (126, 205, 424). (See Figs. 1, 2b and 4; Pg. 11, line 24-Pg. 12, line 2, Pg. 16, line 23-Pg. 17, line 8). Correspondingly, in those instances where the top rated products (based on evaluative metrics) may not correspond to the product category features of the user's personal preferences or priorities, the present invention further allows customized ranking of the products based on such personal preferences or priorities.

Independent claim 30 specifically recites limitations consistent with the above noted features. In particular, independent claim 30 requires a “means for assigning a plurality of feature categories corresponding to a plurality of product features for at least one product category based on available data in the data records” (201, 301, 401). (See Figs. 2a, 2b, 3, and 4; Pg. 7, lines 6-18, Pg. 10, lines 15-17, Pg. 11, lines 17-19, Pg. 12, lines 3-4, Pg. 14, lines 17-18). In addition, claim 30 recites “means for assigning a weighted importance to the plurality of feature categories based on available data in the data records” (202, 302, 402). (See Figs. 2a, 2b, 3, and 4; Pg. 7, lines 6-18, Pg. 10, lines 20-26, Pg. 11, lines 19-20, Pg. 12, lines 5-6, Pg. 14, lines 18-19). Claim 30 further recites a “means for assigning evaluative metrics to each feature in each feature category” (422). (See Fig. 4; Pg. 7, lines 6-18, Pg. 16, lines 5-20). Claim 30 also recites a “means for ranking products of the plurality of different brands in the product category according to the weighted importance of the feature categories included in each item and based on each product’s evaluative metrics” (424, 425, 500). (See Figs. 4 and 5; Pg. 7, lines 6-18, Pg. 17, lines 8-19). Furthermore, claim 30 recites a “means for receiving a plurality of selections from a user indicating a plurality of feature categories that are of importance to the user for the product category” (204, 423). (See Figs. 2b and 4; Pg. 7, lines 6-18, Pg. 11, lines 21-23, Pg. 16, lines 23-24). Claim 30 also recites a “means for assigning an increased weighted importance of the selected feature categories.” (See Figs. 2b and 4; Pg. 7, lines 6-18, Pg. 11, line 21-Pg. 12, line 2, Pg. 16, line 23-Pg. 17, line 8). Claim 30 also recites a “means for generating a customized ranking of products in the product category ranked based on the weighted importance of each feature categories, the increased weighted importance of the selected feature categories, and each product’s evaluative metrics” (126, 424). (See Figs. 1 and 4; Pg. 7, lines 6-18, Pg. 16, line 27-Pg. 17, line 12). Finally, claim 30 recites a means for providing to the user, the generated customized ranking of products in the product category ranked (126). (See Fig. 1; Pg. 7, lines 6-18).

Independent claim 31 also specifically recites limitations consistent with the above noted features. In particular requires, *inter alia*, “receiving a plurality of selections from a user indicating a plurality of feature categories that are of

importance to the user” (204, 423). (See Figs. 2b and 4; Pg. 11, lines 21-23, Pg. 16, lines 23-24). Claim 31 also recites “assigning an increased weighted importance of the selected feature categories”. (See Figs. 2b and 4; Pg. 11, line 21-Pg. 12, line 2, Pg. 16, line 23-Pg. 17, line 8). In addition, independent claim 31 further requires generating a customized ranking of products “ranked based on . . . the increased weighted importance of the selected feature categories” and “providing to the user, the generated customized ranking of products in the product category” (126, 205, 424). (See Figs. 1, 2b and 4; Pg. 11, lines 24-26, Pg. 16, line 27-Pg. 17, line 12).

Independent claims 29, 32, and 33 at least recite the feature of receiving selections from a user indicating feature categories important to the user, and generating a customized ranking at least partially based on the received selections. In particular, independent claim 29 specifically requires “receiving a plurality of selections from a user indicating a plurality of feature categories that are of importance to the user” (204, 423). (See Figs. 2b and 4; Pg. 11, lines 21-23, Pg. 16, line 23-24). Claim 29 also recites “generating a customized ranking of products ranked . . . based on . . . the increased weighted importance of the selected feature categories”. (205, 424). (See Figs. 2b and 4; Pg. 11, lines 24-26, Pg. 16, line 23-Pg. 17, line 12). In addition, independent claim 29 also requires “providing the user, the generated customized ranking of products of a plurality of different brands in a product category” (126, 424, 501). (See Figs. 1, 2b, 4 and 5; Pg. 11, lines 24-26, Pg. 16, Line 27-Pg. 17, line 23). Furthermore, independent claim 29 recites assigning a property type to each feature category (421). (See Fig. 4; Pg. 14, line 19-Pg. 16, line 2).

Independent claim 32 requires “receiving selections from a user indicating a plurality of feature categories that are of importance to the user for the product category” (204, 423), and requires “assigning an increased weighted importance of the selected feature categories”. (See Figs. 2b and 4; Pg. 11, line 21-Pg. 12, line 2, Pg. 16, line 23-24). Claim 32 further requires “generating a customized ranking of products in the product category ranked based on . . . the increased weighted importance of the selected feature categories”. (205, 424). (See Figs. 2b and 4; Pg. 11, lines 24-26, Pg. 16, line 23-Pg. 17, line 12). Moreover, claim 32 recites

“providing to the user, the generated customized ranking products of the plurality of different brands in the product category” (126, 424, 501). (See Figs. 1, 2b, 4 and 5; Pg. 11, lines 24-26, Pg. 16, Line 27-Pg. 17, line 23).

Finally, independent claim 33 requires “a controller that receives a plurality of weighting selections from a user for a plurality of feature categories corresponding to the importance of said plurality of feature categories to the user” (204, 423). (See Figs. 2b and 4; Pg. 7, lines 6-18, Pg. 11, lines 21-23, Pg. 16, line 23-Pg. 17, line 8). Claim 33 also requires “a processor that generates a ranking of said plurality of products . . . based at least partially on said plurality of weighting selections of said plurality of feature categories from the user . . . so that said generated ranking of said plurality of products is customized to the user” (126, 424, 425, 500). (See Figs. 1, 2b, 4 and 5; Pg. 11, lines 24-26, Pg. 16, Line 27-Pg. 17, line 23).

Thus, the present invention allows the user to assign increased weighted importance to those feature categories deemed important by the user. Receiving selections from a user indicating feature categories important to the user, and assigning an increased weighted importance to the selected feature category, are important aspects of the present invention because this allows the system and method of the present invention to take these user selections into consideration in generating a customized ranking of products. Thus, the provided customized ranking of products is at least partially based on the feature categories that are important to the user, not some third party or merely based on an automated system’s view of what feature categories are important.

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1, 2, 4-6, and 8-58 stand rejected under 35 U.S.C. 103(a) in the Office Action of January 28, 2005, as being unpatentable over U.S. Patent No. 6,785,671 to Bailey et al. Thus, the issue on appeal is whether claims 1, 2, 4-6, and 8-58 are unpatentable under 35 U.S.C. 103(a) over U.S. Patent No. 6,785,671 to Bailey et al.



## **VII. ARGUMENT**

### Claims 1, 2, 4-6, and 8-58 Rejected under 35 U.S.C. 103(a)

Claims 1, 2, 4-6, and 8-58 stand rejected under 35 U.S.C. 103(a) in the Office Action of January 28, 2005, as being unpatentable over U.S. Patent No. 6,785,671 to Bailey et al.

Bailey et al. discloses a search engine system for assisting users in locating web pages that allow user-specified products to be purchased. (See Bailey Abstract). The reference discloses that the web pages located by a crawler program are scored based on a set of rules, according to likelihood of including an online product offering. A query server accesses an index of the scored web pages to locate web pages that are both responsive to a user's search query, and also likely to include a product offering. The responsive web pages are listed on a composite search results page together with products that satisfy the query. Thus, the system disclosed in Bailey et al. is directed to a search engine technology which identifies web pages associated with a product specified by the user, where the web pages allow for the product to be purchased.

Referring to the Office Action of January 28, 2005, the Examiner asserts that Bailey et al. discloses a system in which weighted importance is assigned to plurality of feature categories/property type. The Examiner admits that Bailey et al. does not explicitly disclose generating a customized ranking of products and assigning an increased weighted importance. (See Office Action, Pg. 2, ¶2). However, the Examiner asserts that step 650 disclosed in Bailey et al. can be viewed as generating a customized ranking, and that such ranking would be obvious. The Appellants respectfully disagree with these assertions for the reasons set forth herein below.

The above described feature of the present invention which require receiving selections from a user indicating feature categories that are important to the user, assigning an increased weighted importance of the selected feature category, generating a customized ranking based at least on the increased weighted importance, and providing the user with the generated customized ranking, as recited in all of the independent claims are nowhere disclosed, taught or otherwise suggested in the cited Bailey et al. reference.

In the above regard, Bailey et al. does not even disclose feature categories which are assigned to a product category at all. In contrast, Bailey et al. merely discloses product categories, for example, categories of “books”, “music”, “video”, etc. (See Bailey, Figs. 2 and 3). Bailey et al. does not disclose or suggest that each product category can be assigned with feature categories that are associated with those product categories described. As noted previously, feature categories correspond to those features which are important to a product. (See Pg. 10, lines 15-26 and 21-22, Pg. 11, line 7-Pg. 12, line 11). Instead, the results of the system disclosed in Bailey et al. are generated based on the relevance of the webpage which is commonly used by search engines to determine which web pages to display in response to a search query, i.e. as a search result. (See Bailey, Col. 2, lines 30-40).

It should be appreciated that there is a significant difference between a system that generates results based upon mere “relevance” of features as performed by the system of Bailey et al., and the method of claim 1 which provides a ranking of products based on the importance of the features. For example, it should be noted that there are well over one hundred features identified and attributed to digital cameras, but most of these features have very little importance to most users (e.g. the length of the battery charger power cord, suggested operating temperature, etc.). The system of Bailey et al. merely watches what features are mentioned in merchant's web pages, and records those pages having the highest frequency of matches or hits as being “relevant”. (See Col. 2, lines 37-44). The system of Bailey et al. does not distinguish which features of a product category are important or unimportant. Unimportant features may be abundant in product data records because merchants routinely save the entire manufacturer's specification table on to their web pages in some default technical grouping or alphabetical order.

In contrast, the present invention recited in claim 1 utilizes feature categories associated with a product category, as well as the weighted importance of the feature categories, to rank the products so that the highest ranked products can be presented to the user. In this regard, Bailey et al. does not even recognize that each product category can be assigned with a plurality of different feature categories in a manner described (for example, feature categories for PDAs and digital cameras), and ranked

according to the assigned weighted importance. As noted in the specification, feature categories for the product category of Personal Digital Assistants (PDA's) include screen type, memory, upgradability, and functions, etc., and are set forth in the specification as examples for clarity purposes. (See Fig. 5; Pg. 11, line 7-Pg. 12, line 11). Correspondingly, Bailey et al. also does not disclose, teach, or otherwise suggest that the user can select which of the feature categories (for a given product category) are important to the individual user. Of course, Bailey et al. also fails to disclose, teach, or otherwise suggest that the weighted importance of these feature categories selected by the user is increased.

In particular, in the method and system of Bailey et al., the user could modify their query to mention keywords related to some desired feature categories, rather than keywords that are directed to some unimportant feature category. The system disclosed in Bailey et al. would respond to such modification by retrieving relevant items satisfying the modified query. However, there is a significant difference between retrieving every PDA that mentions a particular feature, and retrieving all PDAs, and ranking higher, those PDAs that have the highest merit for a plurality of product categories based on evaluative metrics. In other words, the present invention presents search results based upon evaluative rankings of the products, not merely based on relevant "hits" of the user query. In addition, there is even further difference between the system disclosed in Bailey et al. and the present invention in that in the preferred embodiment, those PDAs having the highest merit according to the evaluative metrics, are further ranked on the basis of the user selected feature categories and provided to the user. In other words, the present invention weighs those feature categories which are user selected to provide a customized ranking of products that identifies those products having the highest merit for those feature categories deemed important by the user.

The method and system disclosed in Bailey et al. does not disclose, or render obvious, application of evaluative metrics and/or ranking of products based on such metrics. In addition, since there is no representation of evaluative metrics in the method and system of Bailey et al., it fails to render obvious, the present invention, or the functionality provided therein.

In contrast to the method and system disclosed by Bailey et al., the invention of claim 1 specifically recites receiving a selection from a user of a feature category, and assigning an increased weighted importance to the selected feature category. This allows the generation of a customized ranking of products that are ranked at least partially based on those feature categories deemed important by the user as also recited in claim 1. For example, available functions of a PDA may be the most important to one user, with the screen type being second in importance, etc., while to another user, upgradability may be the most important with the amount of memory being second in importance, etc.

The Examiner's assertion that providing customized ranking for Bailey et al. would be obvious based on inherent analysis performed by the user in purchasing a plurality of products is clearly unfounded. (See Office Action, Pg. 2, ¶2). Step 650 of Bailey et al. cited by the Examiner in support of his proposition only describes the determination of a "relevance" ranking by the disclosed system of Bailey et al. so that the system can determine the arrangement of the product categories for display. (See Bailey, Col. 16, lines 25-29; Figs. 6-8). This step does not correlate or suggest receiving selections from a user indicating importance of feature categories of a product category. Instead, in Bailey et al., the relevance (which again, is not the same or equivalent to importance recited in the present claim) is determined by the disclosed system, not the user. Consequently, the arrangement of the categories displayed by Bailey et al. is determined wholly by the system, without regard to the feature categories that are important to the product category, or to feature categories that are of importance to a particular user as recited in claim 1.

The above arguments are equally applicable to the Examiner's rejection of independent claims 30 and 31, and thus, are omitted herein to avoid repetition. Moreover, the above presented arguments regarding receiving a selection from a user, assigning an increased weight importance to the selected feature category, and providing a customized ranking of products, are also applicable to independent claims 29, 32, and 33, and thus, are also omitted herein to avoid repetition.

In view of the above, the Appellants respectfully contend that the Examiner has failed to establish the required *prima facie* case of obviousness of any of the

pending claims. In the Office Action, the Examiner fails to provide credible support as to why it would be obvious to provide the features recited in the pending claims, or identify any teaching in the prior art of record to modify the system of the Bailey et al. Instead, the Examiner merely asserts in the Office Action, that there would be obvious motivation to “add a common knowledge additional ranking of products that consumers inherently analyze when purchasing from a plurality of products having alternative features.” (See Office Action, Pg. 2, ¶2). In this regard, the Appellants believe that the Examiner is engaging in improper “hindsight reconstruction” to derive the present invention by extrapolating a motivation that clearly does not exist in the text of the cited Bailey et al. reference, or otherwise in the art. (See *In re Dow Chemical Co.*, 5 USPQ2d 1529, 1532 (Fed. Cir. 1988)).

Correspondingly, the Appellants respectfully contend that Bailey et al. fails to disclose, teach, or otherwise suggest, ranking products in the product category according to the weighted importance of the feature categories as recited in pending independent claims 1, 30, and 31. The appellants further contend that Bailey et al. further fails to disclose, teach, or otherwise suggest receiving a selection from a user of at least one feature category, assigning an increased weighted importance of the selected feature category, and generating a customized ranking of products based at least partially on the increased weighted importance, as recited in all of the pending independent claims 1 and 29-33.

Finally, it is unclear as to why the Examiner summarily asserts that various other dependent claims addressed below would have been obvious to one of skill in the art. Bailey et al. clearly fails to disclose, teach or otherwise suggest the limitations cited therein.

#### Claims 4 and 5

Claims 4 and 5 recite assigning a tag (306), assigning a relation type (309), creating links (310) and using the assigned relation to create hierarchical category tree (313). (See Fig. 3; Pg. 12, line 8-Pg. 13, line 11). These features are directed to identifying essential feature categories of a product category, interlinking of product categories that may be related, and are not disclosed or suggested by the cited Bailey

et al. reference. In this regard, because the Examiner's rejection does not set forth in detail as to how these claims are rendered obvious by the cited Bailey et al. reference, further arguments refuting the Examiner's position cannot be presented by the Appellants. However, it is the Appellants' position that these features are not disclosed, taught, or otherwise suggested by Bailey et al. in any manner and that these claims were also improperly rejected.

Claims 6, and 8-12

Claims 6, 8-12 recite assigning a variety of property types to a feature category (421). (See Fig. 4; Pg. 14, line 16-Pg. 16, line 2). This feature is directed to identifying how a particular property of a feature category is measured, and is not disclosed or suggested by the cited Bailey et al. reference. Because the Examiner's rejection does not set forth in detail as to how these claims are rendered obvious by the cited Bailey et al. reference, further arguments refuting the Examiner's position cannot be presented by the Appellants. However, it is the Appellants' position that these features are not disclosed, taught, or otherwise suggested by Bailey et al. in any manner and that these claims were also improperly rejected.

Claims 19 and 20

Claims 19 and 20 recite assigning a variety of relation types (309). (See Fig. 3; Pg. 12, line 25-Pg. 13, line 2). This feature is directed to interlinking of product categories that may be related, and are not disclosed or suggested by the cited Bailey et al. reference. Because the Examiner's rejection does not set forth in detail as to how these claims are rendered obvious by the cited Bailey et al. reference, further arguments refuting the Examiner's position cannot be presented by the Appellants. However, it is the Appellants' position that these features are not disclosed, taught, or otherwise suggested by Bailey et al. in any manner and that these claims were also improperly rejected.

**VIII. CLAIMS APPENDIX**

Appealed claims are appended hereto in the attached **CLAIMS APPENDIX**.

**IX. EVIDENCE APPENDIX**

None.

**X. RELATED PROCEEDINGS APPENDIX**

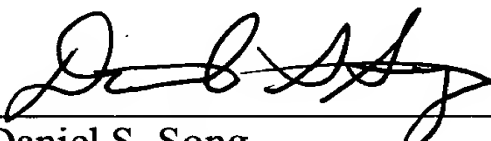
None.

**XI. CONCLUSION**

Thus, at least for the foregoing reasons, the Appellants contend that the Examiner's rejection of the presently pending claims is improper in that the cited Bailey et al. reference does not render the claimed invention obvious or unpatentable. Therefore, the reversal of the Examiner's rejection under 35 U.S.C. §103(a) with respect to all of the pending claims 1, 2, 4-6, and 8-58 of the present application is respectfully requested.

Respectfully submitted,  
**NIXON PEABODY, LLP**

Date: **February 6, 2006**

  
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**CLAIMS APPENDIX**

1. A method of ranking products of a plurality of different brands based upon data records stored in at least one computer readable storage medium and including data indicating product features and values corresponding to the product features, said method comprising:

assigning a plurality of feature categories corresponding to a plurality of product features for at least one product category based on available data in the data records;

assigning a weighted importance to the plurality of feature categories based on available data in the data records;

assigning evaluative metrics to each feature in each feature category;

ranking products of the plurality of different brands in the product category according to the weighted importance of the feature categories included in each item and based on each product's evaluative metrics;

receiving a plurality of selections from a user indicating a plurality of feature categories of importance to the user for the product category;

assigning an increased weighted importance of the selected feature categories;

generating a customized ranking of products in the product category ranked based on the weighted importance of each feature categories, the increased weighted importance of the selected feature categories, and each product's evaluative metrics; and

providing to the user, the generated customized ranking of products in the product category.

2. The method of claim 1 wherein assigning a weighted importance to each feature category comprises assigning a score between 0 and 100 to each feature category in a product category.

3. (Canceled)



4. The method of claim 1 further comprising:
  - assigning a tag to each essential feature category of each product category based on available data;
  - assigning a relation type of kind to each product category if the product category includes all of the feature categories having the tag of another product category and includes at least one feature category that the other product category does not have wherein the product category is labeled a child category of the other product category and the other product category is labeled a parent category of the child product category;
  - creating links within each product category to reflect the assigned relation; and
  - using the assigned relation to create at least one hierarchical product category tree wherein each hierarchical category tree has a heading product category that is only a parent category and changing the assigned weighted importance of a feature in the parent category changes the assigned weighted importance of the feature in the child category.
5. The method of claim 4 wherein the assigned weighted importance of a feature in a child category overrides weighted importance assigned to the feature in the child category's parent category.
6. The method of claim 1 further comprising:
  - assigning a property type to each feature category;
  - wherein said step of assigning the evaluative metrics to each feature in each feature category is based on the feature category property type and available data unless the property type is a discrete property type.
7. (Canceled)
8. The method of claim 6 wherein assigning the property type comprises:
  - assigning a numerical property type to a feature category if the features in the feature category are measured in a quantitative way;

assigning an enumerated property type to a feature category if the features in the feature category have a fixed number of specified values including

assigning a sub-property type of discrete if one feature in a feature category is not inherently more valuable than another,

assigning a sub-property type of scalar if one feature in a feature category is inherently more valuable than another

assigning a sub-property type of Boolean if the features in a feature category may have a valuation of only yes or no;

assigning a sub-property type of qualified Boolean if the feature in a feature category may have a valuation of yes, no, or optional; and

assigning a property type of text property if the features in the feature category are represented by free form text.

9. The method of claim 6 further comprising:

assigning a special meta-tag to a cluster of feature categories based on groupings derived from the data records if the features of the categories may have a value consisting of one of: yes, no or optional.

10. The method of claim 9 further comprising:

ranking items within a product category by the number of feature categories represented in an item within a cluster of feature categories.

11. The method of claim 6 further comprising:

assigning a evaluative tag of forward metric to a feature category if a value of an item in a product category increases as a numerical valuation of features within the feature category increases based on available data;

assigning a evaluative tag of backward metric based on available data to a feature category if the value of an item in a product category decreases as numerical valuation of features within the feature category increases; and

assigning a evaluative tag of non applicable based on available data to a feature category if the value of an item in a product category does not change with numerical valuation of features within a feature category,

wherein the evaluative tag is used to rank items in a product category.

12. The method of claim 6 further comprising:  
presenting a user with a choice of at least two feature categories for sorting;  
and  
sorting items within a product category according to the user chosen feature categories, the weighted importance of all the feature categories and the evaluative metrics of the feature categories applied to the features within the feature categories.
13. The method of claim 1 further comprising:  
deriving ranges of values within feature categories from the data records to determine natural ranges for grouping numerical features.
14. The method of claim 13 further comprising:  
presenting a user with sub-ranges of values within feature categories for filtering product data to be presented.
15. The method of claim 1 further comprising:  
applying statistical analysis to derive the placement of an item within a product category with respect to at least one feature category.
16. The method of claim 15 wherein statistical analysis is applied to derive the placement of an item within a product category with respect to two feature categories.
17. The method of claim 15 further comprising:  
graphing the placement of an item within a product category.
18. The method of claim 17 further comprising:  
presenting the user with a graph of the placement of a user chosen item with respect to other items in a product category based on the at least one feature category.

19. The method of claim 1 further comprising:

assigning relation types to each product category to relate each product category to at least one other product category if a related product category exists including

assigning a kind of relation type if a product category shares all the feature categories of another product category and has at least one feature category that the second product category does not have,

assigning a part of relation type if items in a product category are used only by inclusion in items in a second product category,

assigning a accessory relation type if items in a first product category are used only in conjunction with a second product category although the items in the second product category may be used without the items in the first product category,

assigning a resource relation type if items in a first product category are used only in conjunction with items in a second product category and must be replaced or replenished; and

creating links within each product category to reflect each assigned relation type.

20. The method of claim 19 further comprising:

creating hierarchical category trees using the kind of relation type assignments wherein each hierarchical category tree has one product category that is only a parent category.

21. The method of claim 1 wherein the products in each product category are products offered for sale by merchants.

22. The method of claim 1 wherein the products in each product category are products offered for sale on the internet.

23. The method of claim 1 further comprising:  
assigning a weighted importance to buying information categories of product based on available data and ranking merchants offering products based on the weighted importance of the buying information categories.
24. The method of claim 23 further comprising:  
assigning evaluative metrics to the buying information categories of the product categories and ranking the merchants offering each item based on the weighted importance of the buying information categories and evaluative metrics of the buying information categories.
25. The method of claim 23 wherein the buying information categories include price, shipping costs, shipping method and availability.
26. The method of claim 1 further comprising:  
allowing a user to choose an item from a list of products in a product category;  
and  
displaying the merchants selling the chosen products.
27. The method of claim 26 further comprising:  
displaying buying information for each merchant selling the chosen products.
28. The method of claim 26 further comprising:  
displaying the merchant buying information in a ranked list wherein the merchant buying information is ranked according to a weighted importance assigned to each buying information category and evaluative metrics applied to each buying information category based on the data records.

29. A method of ranking products of a plurality of different brands, said method comprising:

assigning a plurality of feature categories to each product category based on data records stored in at least one computer readable storage medium and including data indicating product features and values corresponding to the product features;

assigning a property type to each feature category;

receiving a plurality of selections from a user indicating a plurality of feature categories that are of importance to the user;

assigning evaluative metrics to each product feature in each feature category based on the property type and available data unless the property type is a discrete property type;

generating a customized ranking of products in the product category ranked based on the weighted importance of each feature categories, the increased weighted importance of the selected feature categories, and each product's evaluative metrics; and

providing the user, the generated customized ranking of products of a plurality of different brands in a product category.

30. A system ranking products of a plurality of different brands based upon data records stored in at least one data storage device and including data indicating product features and values corresponding to the product features, said system comprising:

means for assigning a plurality of feature categories corresponding to a plurality of product features for at least one product category based on available data in the data records;

means for assigning a weighted importance to the plurality of feature categories based on available data in the data records;

means for assigning evaluative metrics to each feature in each feature category;

means for ranking products of the plurality of different brands in the product category according to the weighted importance of the feature categories included in each item and based on each product's evaluative metrics;

means for receiving a plurality of selections from a user indicating a plurality of feature categories that are of importance to the user for the product category;

means for assigning an increased weighted importance of the selected feature categories;

means for generating a customized ranking of products in the product category ranked based on the weighted importance of each feature categories, the increased weighted importance of the selected feature categories, and each product's evaluative metrics; and

means for providing to the user, the generated customized ranking of products in the product category ranked.

31. A computer readable storage medium containing executable computer program instructions which when executed cause a digital processing system to perform a method for ranking products of a plurality of different brands based upon data records stored in at least one computer readable storage medium and including data indicating product features and values corresponding to the product features, said method comprising:

assigning a plurality of feature categories corresponding to product features for at least one product category based on available data in the data records;

assigning a weighted importance to the plurality of feature categories based on available data in the data records;

assigning evaluative metrics to each feature in each feature category;

ranking products of the plurality of different brands in the product category according to the weighted importance of the feature categories included in each item and based on each product's evaluative metrics;

receiving a plurality of selections from a user indicating a plurality of feature categories that are of importance to the user for the product category;

assigning an increased weighted importance of the selected feature categories;

generating a customized ranking of products in the product category ranked based on the weighted importance of each feature categories, the increased weighted

importance of the selected feature categories, and each product's evaluative metrics;  
and

providing to the user, the generated customized ranking of products in the product category.

32. A method of ranking products of a plurality of different brands based upon data records stored in at least one computer readable storage medium and including data indicating product features and values corresponding to the product features, said method comprising:

assigning a plurality of feature categories corresponding to a plurality of product features for at least one product category based on available data in the data records;

assigning a weighted importance to the plurality of feature categories based on available data in the data records;

assigning evaluative metrics to each feature in each feature category;

receiving selections from a user indicating a plurality of feature categories that are of importance to the user for the product category;

assigning an increased weighted importance of the selected feature categories;

generating a customized ranking of products in the product category ranked based on the weighted importance of each feature categories, the increased weighted importance of the selected feature categories, and each product's evaluative metrics;  
and

providing to the user, the generated customized ranking products of the plurality of different brands in the product category.

33. A system for generating a customized ranking of products of a plurality of different brands in a product category comprising:

a database having data records for a plurality of products of at least one product category, said data records indicating features of said plurality of products in said at least one product category;



a controller that receives a plurality of weighting selections from a user for a plurality of feature categories corresponding to the importance of said plurality of feature categories to the user; and

a processor that generates a ranking of said plurality of products of the plurality of different brands in the product category based at least partially on said plurality of weighting selections of said plurality of feature categories from the user, and said data records in said database, so that said generated ranking of said plurality of products is customized to the user.

34. The system of claim 33, wherein said data records includes evaluative metrics associated with said plurality of products, and said processor generates said customized ranking based on said evaluative metrics of said plurality of products.

35. The system of claim 34, wherein said processor generates an initial ranking of said plurality of products in said at least one product category by assigning initial weighted importance to said plurality of feature categories.

36. The system of claim 35, wherein said processor re-sorts said initial ranking of products based on said plurality of selections received from the user.

37. The system of claim 36, wherein said processor re-sorts said initial ranking of products by assigning an increased weighted importance of the selected feature categories.

38. The system of claim 33, wherein said processor further assigns evaluative metrics to each feature in each feature category.

39. The system of claim 33, wherein said controller is graphically rendered for the user to allow indication of plurality of feature categories of importance to the user.

40. The system of claim 33, wherein said plurality of feature categories are graphically rendered for the user.

41. The system of claim 40, wherein said plurality of feature categories are graphically rendered in a pop-up window.
42. The system of claim 33, wherein said controller allows the user to assign numerical values to weigh said plurality of feature categories.
43. The system of claim 33, wherein said controller allows the user to select from a numerical scale to weigh said plurality of feature categories.
44. The system of claim 33, wherein said controller allows the user to assign a letter value to weigh said plurality of feature categories.
45. The system of claim 33, wherein said system further graphically renders said customized ranking of products in the product category for the user.
46. The system of claim 33, wherein said processor is adapted to reduce at least one of said plurality of weighting selections from the user to include additional products in said generated customized ranking.
47. The system of claim 33, wherein said plurality of feature categories includes brand and price.
48. The system of claim 33, wherein said system is connected to a wide area network and remotely accessible by the user.
49. The method of claim 1, further including graphically rendering the user's selections indicating importance of the plurality of feature categories to the user.
50. The method of claim 1, further including graphically rendering said plurality of feature categories for the user.
51. The method of claim 29, further including graphically rendering the user's selections indicating importance of the plurality of feature categories to the user.

52. The method of claim 29, further including graphically rendering said plurality of feature categories for the user.

53. The system of claim 30, further including a means for graphically rendering the user's selections indicating importance of the plurality of feature categories to the user.

54. The system of claim 30, further including a means for graphically rendering said plurality of feature categories for the user.

55. The medium of claim 31, wherein said method further includes graphically rendering the user's selections indicating importance of the plurality of feature categories to the user.

56. The medium of claim 31, wherein said method further includes graphically rendering said plurality of feature categories for the user.

57. The method of claim 32, further including graphically rendering the user's selections indicating importance of the plurality of feature categories to the user.

58. The method of claim 32, further including graphically rendering said plurality of feature categories for the user.